

CLAIMS

What is claimed is:

1. A light emitting device package, comprising:
a semiconductor junction operable to emit light when biased;
an homogenous composition deposited on the semiconductor junction adapted to filter and combine predetermined wavelengths of light from the semiconductor surface.
2. The light emitting device package of Claim 1, the homogenous composition further comprising a sintered and pelletized mixture of a molding compound and a luminous substance.
3. The light emitting device package of Claim 2, wherein the molding compound is in pelletized form prior to sintering and pelletization.
4. The light emitting device package of Claim 3, the pelletized molding compound further comprising a clear epoxy.
5. The light emitting device package of Claim 2, wherein the luminous substance is in powder form prior to sintering and pelletization.
6. The light emitting device package of Claim 5, wherein the luminous powder is less than or equal to 5 microns in size prior to sintering and pelletization.
7. The light emitting device package of Claim 6, wherein the luminous powder is spherical or flake-like in shape prior to sintering and pelletization.
8. The light emitting device package of Claim 2, the molding compound further comprising a clear epoxy.
9. The light emitting device package of Claim 8, the clear epoxy further incorporating a thixotropic agent to thicken the epoxy casting resin.
10. The light emitting device package of Claim 2, the luminous substance further comprising a Cerium doped garnet.
11. The light emitting device package of Claim 2, the luminous substance further comprising YAG:Ce.
12. The light emitting device package of Claim 2, the luminous substance having admixed a predetermined amount of mineral diffuser so as to optimize the luminous pattern of the composition.

13. The light emitting device package of Claim 12, the mineral diffuser comprising CaF₂.

14. The light emitting device package of Claim 2, the molding compound and luminous substance composition further including a processing adjuvant.

15. The light emitting device package of Claim 2, further comprising a predetermined chromaticity of light based on the luminous powder's percentage by weight of the composition and micron size, before admixing and pelletizing.

16. A method of fabricating a light emitting device, comprising:
admixing a luminous substance to a transferable grade molding compound to derive a homogeneous mixture;
pressing and sintering the homogeneous mixture into solid pellets;
processing the solid pellets for application on a semiconductor surface; and
depositing the processed solid pellets on the semiconductor surface.

17. The method of fabricating a light emitting device of Claim 16 wherein the molding compound is in a pelletized form prior to pressing and sintering the homogeneous mixture into solid pellets.

18. The method of fabricating a light emitting device of Claim 16 wherein the pelletized molding compound further comprises a clear epoxy.

19. The method of fabricating a light emitting device of Claim 16 wherein the molding compound is in a powdered form prior to pressing and sintering the homogeneous mixture into solid pellets.

20. The method of fabricating a light emitting device of Claim 19 wherein the powdered molding compound further comprises a clear epoxy.

21. The method of fabricating a light emitting device of Claim 16 wherein the luminous substance is in powdered form prior to pressing and sintering the homogeneous mixture into solid pellets.

22. The method of fabricating a light emitting device of Claim 16 wherein the light emitted by the light emitting device comprises a white light.

23. A method of fabricating a light emitting chip comprising depositing an admixed substance of epoxy and a luminous substance around an LED chip located on a copper lead frame.